

composition comprising an agent which reacts with a carbonyl moiety of an early glycosylation product resulting from the initial glycosylation of said target protein, wherein said agent is selected from the group consisting of aminoguanidine, α -hydrazinohistidine, and mixtures thereof, whereby the subsequent cross-linking of said early glycosylation product is inhibited.

2. The method of claim 1, wherein said target protein is a structural protein.

3. The method of claim 1, wherein said target protein is selected from the group consisting of collagen, elastin lens protein, blood vessel walls, nerve protein and glomerular basement membrane.

4. The method of claim 1, wherein said pharmaceutical composition comprises said agent and a pharmaceutically acceptable carrier.

5. The method of claim 1, wherein said aminoguanidine is selected from the group consisting of aminoguanidine hydrochloride, aminoguanidine bicarbonate, aminoguanidine sulfate and mixtures thereof.

6. The method of claim 5, wherein said aminoguanidine hydrochloride possesses a purity greater than ninety-eight (98%) percent.

7. The method of claim 1, wherein said pharmaceutical composition is administered parenterally.

8. The method of claim 1, wherein said pharmaceutical composition is administered topically.

9. The method of claim 8, wherein said pharmaceutical composition is prepared in an ointment form and said agent is present in an amount of up to about 10% by weight.

10. The method of claim 1, wherein said pharmaceutical composition is administered orally.

11. The method of claim 1, wherein said pharmaceutical composition is administered regularly and daily.

12. The method of claim 1, wherein said pharmaceutical composition is administered in an amount of up to about 25 mg/kg body weight of said animal.

13. The method of claim 1, adapted for the treatment of the complications of diabetes and aging caused by the accumulation advanced glycosylation endproducts in the body.

14. The method of claim 1, adapted for the treatment of diabetic kidney disease.

15. The method of claim 1, adapted for the treatment of glomerulosclerosis.

16. The method of claim 1, adapted for the treatment of peripheral vascular disease.

17. The method of claim 1, adapted for the treatment of atherosclerosis.

18. The method of claim 1, adapted for the treatment of arteriosclerosis obliterans.

19. The method of claim 1, adapted for the treatment of peripheral neuropathy.

20. The method of claim 1, adapted for the treatment of retinopathy.

21. The method of claim 1, adapted for the treatment of cataracts.

22. The method of claim 1, adapted for the treatment of stroke.

23. The method of claim 1, adapted for the treatment of hypertension.

24. The method of claim 1, adapted for the treatment of periarticular rigidity.

25. The method of claim 1, adapted for the treatment of osteoarthritis.

26. The method of claim 1, adapted for the treatment of loss of elasticity and wrinkling of skin.

27. The method of claim 1, adapted for the treatment of stiffening of joints.

28. The method of claim 1, adapted for the treatment of glomerulonephritis.

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